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Kenneth S. Franzel

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EXAMINER

UNELUS, ERNEST

ART UNIT

PAPER NUMBER

2181

MAIL DATE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/003,495	<b>Applicant(s)</b> FRANZEL, KENNETH S.	
	<b>Examiner</b> ERNEST UNELUS	<b>Art Unit</b> 2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

**RESPONSE TO AMENDMENT**

**Claim rejections based on prior art**

Applicant's arguments filed 04/27/2009 with respect to claims 1-4 and 7-43 have been fully considered but are moot in view of the new ground(s) of rejection.

**INFORMATION CONCERNING DRAWINGS**

**Drawings**

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following features must be shown or the feature(s) canceled from the claim(s).

a. **Claims 1-4 and 7-43**, no drawing shows the claimed configuration circuit to include a memory, a processor, a configuration memory, and an embedded configuration module. **That's not a particular item in the drawings that consist of a memory, a processor, a configuration memory, and an embedded configuration module.**

2. **No new matter should be entered.**

3. **Correction is required.**

4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure

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must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## **OBJECTIONS TO THE SPECIFICATION**

### ***Specification Objections***

5. The disclosure is objected to because of the following informalities:
6. A configuration circuit to include a memory, a processor, a configuration memory, and an embedded configuration module is not discloses in the specification.
7. Appropriate correction is required.
8. Applicant's cooperation is requested in correcting any other errors of which applicant may become aware in the specification.

## **REJECTIONS BASED ON PRIOR ART**

### **Claim Rejections - 35 USC § 102**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. **Claims 1, 3, 4, 17-21, 25-29, and 33**, are rejected under 35 U.S.C. 102(e) as being anticipated by Hu (US pat. 6,301,104).

3. In re **claims 1, 17, 18, 25, and 26**, Hu discloses a network backplane interface for a local network, comprising:

(a) a circuit board (**interface card-type motherboard 10, as discloses in fig. 2 and col. 3, line 59**);

(b) a plurality of sockets (**serial ports 56 and 57, as discloses in col. 4, line 2**) connected to the circuit board for [words like 'for' or 'adapted' is intended use. This limitation is mere statements of purpose or use or functional recitations. In re Sinex, 309 F.2d 488, 492, 135 USPQ 302, 305 (CCPA 1962) (statement of intended use in an apparatus claim did not distinguish over the prior art apparatus). If a prior art structure is capable of performing the intended use as recited in the claim, then it meets the claim. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim]) receiving plug-in network devices (see **fig. 2**);

(c) unified power lines (**cable 104, which is made of multiple lines, as discloses in fig. 4**) on the circuit board connected with one or more sockets (**power connector 32, as discloses in fig. 2 and col. 4, line 29**) for powering a plug-in network device in each of the one or more sockets (**see fig. 2**), the unified power lines comprising a single power line connected with all of the one or more sockets (**see fig. 2**);

(d) unified communication lines (**see fig. 2, which discloses the serial ports 56 and 57 having multiple pins for multiple lines**) on the circuit board for communication with a plug-in network when placed in each socket, the unified communication lines comprising a single communication line connected with all of the plurality of sockets (**see fig. 2**);

(e) a housing (**see fig. 1, which discloses the motherboard being place in a house**) for the circuit board, the unified power lines and the unified communication lines, including openings for exposing the plurality of sockets;

(f) a network interface (**USB port 58, as discloses in fig. 2 and col. 4, line 11**) for communication between the plug-in network and an external network, and

(g) a configuration circuit (**the combination of the memory, as discloses in col. 4, lines 21-22 and CPU 130**) on the circuit board, wherein the configuration circuit is operable to receive the configuration associated with a plug-in network device from the plug-in network device and is operable to communicate with a plug-in network device in a socket to identify the plug-in network device and configure the plug-in network device (**see fig. 2**), the configuration circuit comprising:

a memory (**see col. 4, lines 21-22, which discloses “The high-speed memory module connector 41 is provided for a high-speed memory module”**) operable to store configuration

information for a plurality of predetermined plug-in network device types and to store configuration instructions for configuring one or more different plug-in network devices to perform one or more corresponding desired functions (**see fig. 2**); and

a configuration processor (**CPU 130, as discloses in col. 4, line 21**) operable to execute the configuration instructions to communicate with a plug-in network device in a socket, and configure the plug-in network device based on the configuration information (**see fig. 2**).

4. In re **claim 3**, Hu discloses wherein the configuration circuit is further operable to generate a user interface based on the component information, to cause display of the user interface, to receive a configuration command for the plug-in network device via the user interface, and to configure the plug-in network device based on the configuration command (**see fig. 2**).

5. In re **claim 4**, Hu discloses wherein the desired functions comprise a modem function, a broadband access function, firewall security protection, a router function, a hub function, a switch function, a network-attached storage function, a printer server function, or a combination thereof (**see DIP switch 33 in col. 4, line 18**).

6. In re **claims 19 and 27**, Hu discloses wherein a configuration memory (**see col. 4, lines 21-22, which discloses “The high-speed memory module connector 41 is provided for a high-speed memory module”**) having configuration information for a plurality of predetermined plug-in network device types (**see col. 4, lines 21-22**).

7. In re claims **20 and 28**, Hu discloses wherein the configuration module includes extended configuration memory (**CD-ROM 520, as discloses in col. 4, line 24**) for storing configuration information for additional plug-in network device types (**see fig. 2 and col. 4, line 24**).

8. In re **claims 21 and 29**, Hu discloses wherein the configuration module allows configuring of plug-in network devices (**hard disk drive 510 and floppy disk drive 530, as discloses in col. 4, line 24**) in a configuration session for network communication among the plug-in network devices (**see fig. 2 and col. 4, line 24**).

9. In re **claim 33**, Hu further discloses wherein comprising a housing for circuit board sockets, the housing including slots for exposing said sockets (**see fig. 1, which discloses the motherboard being place in a house**).

#### **Claim Rejections - 35 USC § 103**

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 2, 7-16, 22-24, 30-32, and 34-43**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hu (US pat. 6,301,104) in view of Bottom et al. (US pat. 7,339,786).



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12. In re **claims 2**, Hu discloses “The backplane of claim 1,” [See rejection to claim 1 **above**], but fails to disclose expressly a communication controller which allows communication between the plug-in network devices.

Bottom discloses a communication controller which allows communication between the plug-in network devices (**see col. 6, lines 27-38**).

Hu (US pat. 6,301,104) and Bottom et al. (US pat. 7,339,786) are analogous art because they are from the same field of motherboard.

at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine a card-type motherboard having a central processing unit (CPU), chipset, memories and the like as described by Hu and a modular server system includes a midplane having a system management bus and a plurality of blade interfaces on the midplane as taught by Bottom.

The motivation for doing so would have been because Bottom teaches that “**the high density of the modular server system 100 reduces real estate costs, and the modular nature of its field replaceable units allows repairs and replacements to be performed quickly and easily**” (see col. 7, line 67 to col. 8, line 2).

Therefore, it would have been obvious to combine Bottom et al. (US pat. 7,339,786) with Hu (US pat. 6,301,104) for the benefit of creating a network backplane interface for a local network to obtain the invention as specified in claim 2.

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13. In re **claims 7**, the combination of Hu and Bottom discloses “The backplane of claim 1,” [See rejection to claim 1 above], Bottom further discloses wherein the network interface comprises a multiple 100baseT Ethernet connector (**see fig. 5 and col. 6, lines 27-38**).

14. In re **claims 8 and 40**, the combination of Hu and Bottom discloses “The backplane of claim 1,” [See rejection to claim 1 above], Bottom further discloses wherein the configuration circuit includes an embedded configuration module (**switch blade 120**) to configure plug-in network devices in a configuration session (**see col. 3, lines 46-65**).

15. In re **claims 9, 22, and 30**, the combination of Hu and Bottom discloses “The backplane of claim 8,” [See rejection to claim 8 above], Bottom further discloses wherein the configuration module configures all plug-in network devices in one configuration session (**see col. 3, lines 46-65**).

16. In re **claims 10, 23, and 31**, the combination of Hu and Bottom discloses “The backplane of claim 9,” [See rejection to claim 9 above], Bottom further discloses wherein the configuration module comprises a platform-independent configuration software (**see col. 3, lines 46-65**).

17. In re **claims 11, 24, and 32**, the combination of Hu and Bottom discloses “The backplane of claim 9,” [See rejection to claim 9 above], Bottom further discloses wherein the configuration circuit provides a user interface (**USB 508 connector, as discloses in col. 6, line**

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**59)** for receiving user configuration commands to configure function of one or more plug-in network devices to perform a desired function, wherein the user interface is operable to configure the one or more plug-in network devices in one session (**see col. 6, lines 59-62**).

18. In re **claim 12** the combination of Hu and Bottom discloses “The backplane of claim 9,” [See rejection to claim 9 above], Bottom further discloses wherein at least one socket is dedicated to connection and communication with an external network (**see col. 6, lines 27-38**).

19. In re **claims 13** the combination of Hu and Bottom discloses “The backplane of claim 12,” [See rejection to claim 12 above], Hu Bottom further discloses including a switch for connecting a security module between said socket for external connection, and the local network (**see col. 4, line 17**).

20. In re **claim 14** the combination of Hu and Bottom discloses “The backplane of claim 9,” [See rejection to claim 9 above], Hu further discloses including a connection for bridging a security module between said socket for external connection, and the local network (**see fig. 2**).

21. In re **claim 15** the combination of Hu and Bottom discloses “The backplane of claim 1,” [See rejection to claim 1 above], Bottom further discloses wherein a socket comprises a RJ-45 socket (**see col. 6, line 36**).

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22. In re **claim 16** the combination of Hu and Bottom discloses “The backplane of claim 9,” [See rejection to claim 9 above], Bottom further discloses wherein a socket comprises a proprietary connector combining power and data connections (**see col. 6, lines 27-38**).

23. In re **claim 34** the combination of Hu and Bottom discloses “The backplane of claim 9,” [See rejection to claim 9 above], Bottom further discloses wherein the circuit board comprises a printed circuit board (**see col. 7, line 41**).

24. **Claims 35-39 and 41-42**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hu (US pat. 6,301,104) in view of Bottom et al. (US pat. 7,339,786), as applied to claim 8, and further in view of Kim et al. (US pat. 6,473,788).

25. In re **claims 35-39 and 41-42**, the combination of Hu and Bottom discloses “The backplane of claim 1,” [See rejection to claim 1 above], but fails to disclose wherein the configuration module provides a common user interface for receiving user configuration commands to configure each plug-in network device from the common user interface, wherein the common user interface further receives user configuration commands to configure the backplane, wherein the common user interface is platform and operating system independent, and utilizes a common communication protocol between the plug-ins and the configuration module, wherein the common user interface comprises a graphical user interface, and wherein the configuration circuit is accessible via a web browser to configure the plug-in network devices.

Kim discloses the user interface for receiving user configuration commands to configure each plug-in and the backplane, the common user interface is platform and operating system independent, utilizing a common communication protocol between the plug-ins and the configuration module, graphical user interface, the configurations circuit is centralized to the backplane, a web browser [150, fig 10; S13040, fig 13B]; if a device is not recognized by the configuration circuit, then the configuration circuit obtains configuration instructions for the unrecognized device from a source external to the configuration circuit [S1425, fig 14], if a plug-in device is not recognized by the configuration circuit, then the configuration circuit obtains configuration instructions for the unrecognized device from a user [S1424, fig 14].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have the user interface for receiving user configuration commands to configure each plug-in and the backplane, the common user interface is platform and operating system independent, utilizing a common communication protocol between the plug-ins and the configuration module, graphical user interface, the configurations circuit is centralized to the backplane, a web browser; if a device is not recognized by the configuration circuit, then the configuration circuit obtains configuration instructions for the unrecognized device from a source external to the configuration circuit; if a plug-in device is not recognized by the configuration circuit, then the configuration circuit obtains configuration instructions for the unrecognized device from a user because it would provide a user-friendly system by allowing to have a user interface with more flexible by allowing it to operate in multiple configurations.

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26. In re **claims 43**, the combination of Hu, Bottom, and Kim discloses “The backplane of claim 1,” [See rejection to claim 1 above], Bottom further discloses wherein if a plug-in network device is not recognized by the configuration circuit, then the configuration circuit obtains configuration instructions for the unrecognized plug-in network device from the unrecognized plug-in network device itself (see col. 3, lines 46-65).

#### **RELEVANT ART CITED BY THE EXAMINER**

27. The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See MPEP 707.05(c).

28. The following references teach a network backplane for a local network.

#### **U.S. PATENT NUMBER**

US 6,886,055; 6,356,438; 6,044,411; 2002/0145847

#### **CLOSING COMMENTS**

##### **Conclusion**

##### **a. STATUS OF CLAIMS IN THE APPLICATION**

29. The following is a summary of the treatment and status of all claims in the application as recommended by **M.P.E.P. 707.07(i)**:

##### **a(1) CLAIMS REJECTED IN THE APPLICATION**

30. Per the instant office action, claims 1-4 and 7-43 have received a final action on the merits.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

**b. DIRECTION OF FUTURE CORRESPONDENCES**

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernest Unelus whose telephone number is (571) 272-8596. The examiner can normally be reached on Monday to Friday 9:00 AM to 5:00 PM.

**IMPORTANT NOTE**

32. If attempts to reach the above noted Examiner by telephone is unsuccessful, the Examiner's supervisor, Mr. Alford Kindred, can be reached at the following telephone number: Area Code (571) 272-4037.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Alford W. Kindred/  
Supervisory Patent Examiner, Art Unit 2181

Ernest Unelus  
Examiner  
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June 25, 2009

/E. U./  
Examiner, Art Unit 2181